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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/874,163	06/05/2001	Chung-Che Wu	JCLA7083	
7590 04/09/2004		EXAMINER		
J.C. PATENT		KIM, HONG CHONG		
4 VENTURE, SUITE 250 IRVINE, CA 92618			ART UNIT	PAPER NUMBER
11.1.1.2, 0.1	,		2186	<i>(</i> -
			DATE MAILED: 04/09/2004	φ

Please find below and/or attached an Office communication concerning this application or proceeding.

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•	Application No.	Applicant(s)				
066-0 4-46 00	09/874,163	WU ET AL.				
Office Action Summary	Examiner	Art Unit				
	Hong C Kim	2186				
The MAILING DATE of this communication appears on the cover sheet with the correspondence address Period for Reply						
A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION. - Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication. - If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely. - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication. - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).						
Status						
1) Responsive to communication(s) filed on 13 Ja	nuary 2004.					
2a)⊠ This action is FINAL . 2b)☐ This						
3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is						
closed in accordance with the practice under Ex parte Quayle, 1935 C.D. 11, 453 O.G. 213.						
Disposition of Claims						
4) Claim(s) 1-13 is/are pending in the application. 4a) Of the above claim(s) is/are withdraw 5) Claim(s) is/are allowed. 6) Claim(s) 1-10 and 13 is/are rejected. 7) Claim(s) 11 and 12 is/are objected to. 8) Claim(s) are subject to restriction and/or						
Application Papers						
9)☐ The specification is objected to by the Examiner.						
10) The drawing(s) filed on is/are: a) accepted or b) objected to by the Examiner.						
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).						
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).						
11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.						
Priority under 35 U.S.C. § 119						
 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f). a) All b) Some * c) None of: 1. Certified copies of the priority documents have been received. 2. Certified copies of the priority documents have been received in Application No. 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)). * See the attached detailed Office action for a list of the certified copies not received. 						
Attachment(s)						
1) Notice of References Cited (PTO-892) 4) Interview Summary (PTO-413)						
Notice of Draftsperson's Patent Drawing Review (PTO-948) Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date	Paper No(s)/Mail Da 5) Notice of Informal Pa 6) Other:	te atent Application (PTO-152)				

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Detailed Action

1. Claims 1-13 are presented for examination. This office action is in response to the amendment filed on 1/13/04.

Information Disclosure Statement

2. Applicants are reminded of the duty to disclose information under 37 CFR 1.56.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

3. Claims 1, 4-10 and 13 are rejected under 35 U.S.C. 102(e) as being anticipated by Chang et al. (Chang) U.S. Patent No. 6,498,759.

As to claim 1, Chang discloses the invention as claimed. Chang discloses a method of automatically determining a type of a memory applied in a computer system (Fig. 5 or 6), wherein the computer system comprises a system power state signal (Fig. 5 or 6 Ref. S51 or s61), a voltage control circuit and at least one memory module slot to accommodate a memory (Fig. 5 or 6 Ref. S52 or s62), the method comprising: outputting a preset voltage to the memory (Fig. 5 or 6 Ref. S52 or s62); performing an

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operation on the memory (Fig. 5 or 6 Ref. s53 or s63); determining a type of the memory (Fig. 5 or 6 Ref. 54 or 64); outputting a control signal (Fig. 5 or 6 Refs. s54-56 or s64-66); outputting a voltage adjustment signal according to the control signal and the system power state signal (Fig. 5 or 6 Refs. s54-56 or s64-66); and outputting a configured operation voltage to the memory according to the voltage adjustment signal (Fig. 5 or 6 Refs. s54-56 or s64-66).

As to claim 4, Chang further discloses a processor executes a software program to perform the operation on the memory, to determine the type of the memory, and to output the control signal (Fig. 5 or 6 Refs. s53-56 or s63-66).

As to claim 5, Chang further discloses performing the operation on the memory with the software program, which software program then determines the type of the memory when the computer system enters a reset state (Fig. 5 or 6 Refs. s53-56 or s63-66).

As to claim 6, Chang further discloses a hardware device performs the operation on the memory, determines the type of the memory, and outputs the control signal (Fig. 5 or 6 Refs. s53-56 or s63-66).

As to claim 7, Chang further discloses the operation comprises an access operation (Fig. 5 or 6).

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As to claim 8, Chang discloses the invention as claimed. Chang discloses a motherboard (Fig. 1 Ref. 100) to automatically determine a type of a memory, used in a computer system that has a system power state signal, the motherboard comprising: a hardware device (Fig. 1), generating a control signal (Fig 1); a memory module slot, accommodating a memory (Fig. 1 Ref. 130); a voltage control circuit (Fig. 1 Ref. 140), coupled to the memory module slot to provide a configured operation voltage to the memory module slot (Fig. 5 Refs 54-56); and a recognition apparatus, coupled to the system power state signal (Fig. 1), the control signal and the voltage control circuit (Fig. 1); wherein the voltage control circuit firstly outputs a preset voltage to the memory (Fig. 5 Ref. 52) and then the hardware device outputs the control signal after performing an operation to determine a type of the memory (Fig. 5 Refs. 51-54); and the recognition apparatus outputs a voltage adjustment signal after receiving the control signal (Fig. 5 Refs. 54-56) and the system power state signal, so that the voltage control circuit outputs the configured operation voltage to the memory (Fig. 5 Refs. 54-56).

As to claim 9, Chang further discloses the hardware device comprises a central process unit executing a software program to generate the control signal (Fig. 3 Ref. 305).

As to claim 10, Chang further discloses the voltage adjustment signal is configured as a high logic state when the system power state signal is a low logic state;

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the voltage adjustment signal is configured as a low logic state when the control signal to be converted from the low logic state to the high logic state and the system power state signal is the high logic state; and the voltage adjustment signal otherwise remains a previous logic state (Fig. 2).

As to claim 13, Chang further discloses the operation comprises an access operation (Fig. 5 Refs. 53-56).

Claim Rejections - 35 USC ' 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

- (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- 4. Claims 2-3 are rejected under 35 U.S.C. 103(a) as being unpatentable over Chang et al. (Chang) U.S. Patent No. 6,498,759 as applied to claim 1 above, and further in view of <u>Applicant's Admitted Prior Art (AAPA)</u> page2.

As to claims 2-3, Chang discloses the claimed invention, however, Chang does not specifically disclose STD and STR modes. AAPA discloses STD and STR modes (page 2 lines 6-11) for the purpose of providing power saving modes thereby consuming less power and generating less heat in the system.

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Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to incorporate STD and STR modes as shown in AAPA into the invention of Chang because it would provide power saving modes thereby consuming less power and generating less heat in the system.

Response to Arguments

5. Applicant's arguments filed 1/13/04 have been fully considered but they are not persuasive.

In response to applicant's argument on page 2 that the prior arts do not disclose outputting a voltage adjustment signal according to the control signal and the system power state signal has been fully considered but it is not persuasive.

Chang discloses outputting a voltage adjustment signal according to the control signal and the system power state signal (Fig. 5 Refs. 54-56 and Fig. 6 Refs. 64-66). In other words, Chang discloses selecting a voltage adjustment signal according to the memory type signals (i.e. module type signal or pulse signal).

In response to applicant's argument on page 4 that the rejection under 35 USC 103 is most has been fully considered but it is not persuasive because the applicant did not provide evidence stated that the subject matter of the reference and the claimed invention were, at the time the invention was made, owned by the same person or subject to an obligation of assignment to the same person. ($S_{ee} \bowtie pep 706.62$)

Allowable Subject Matter

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6. Claims 11 and 12 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Conclusion

- 1. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.
- 2. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

3. When responding to the office action, Applicant is advised to clearly point out the patentable novelty which he or she thinks the claims present in view of the state of the art disclosed by the references cited or the objections made. He or she must also show

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how the amendments avoid such references or objections. See 37 C.F.R. ' 1.111(c).

- 4. When responding to the office action, Applicants are advised to provide the examiner with the line numbers and page numbers in the application and/or references cited to assist examiner to locate the appropriate paragraphs.
- 5. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Hong C Kim whose telephone number is 703-305-3835. The examiner can normally be reached on M-F 9:00 to 6:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Matt M Kim can be reached on (703) 305-3821. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

- 6. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).
- 7. Any inquiry concerning this communication or earlier communications from the

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Examiner should be directed to Hong Kim whose telephone number is (703) 305-3835.

The Examiner can normally be reached on the weekdays from 8:30 AM to 5:00 PM.

If attempts to reach the Examiner by telephone are unsuccessful, the Examiner's supervisor, Matt Kim, can be reached on (703) 305-3821.

Any inquiry of a general nature or relating to the status of this application should be directed to the Group receptionist whose telephone number is (703) 305-3900.

8. Any response to this action should be mailed to:

Commissioner of Patents and Trademarks Washington, D.C. 20231

or faxed to TC-2100: (703) 746-7238

Primary Patent Examiner

April 7, 2004

HK